

PATENT

Atty. Dkt. No. PRVD/002

IN THE CLAIMS:

Please cancel claims 7-16, and amend the claims as follows:

Claim 1 (Currently Amended) A system for verifying a digital signature, comprising:

a first computer having a certificate and a plurality of signed messages forming a digest;

a second computer configured to receive the certificate and the signed ~~message~~ messages; and

a third computer configured to receive the certificate and the signed ~~message~~ messages from the second computer for a validation request, to validate the certificate and to generate a certificate validation statement in response thereto to the plurality, and to provide an acknowledgement and a public key to the second computer, the acknowledgement comprising in part the certificate validation statement, the signed message, a first proof portion having a confirmation associated with the certificate validation statement and the signed message in combination, and a second proof portion having a signed digest having the confirmation as part of a set of confirmations to respond to the plurality of messages in the digest.

Claim 2 (Original) The system of claim 1 further comprising a fourth computer configured to receive the certificate, the signed message, the acknowledgement and the public key.

Claim 3 (Original) The system of claim 2 further comprising a certificate authority configured to provided the certificate to the first computer.

Claim 4 (Original) The system of claim 3 wherein the certificate authority is configured to provide validation information to the third computer.

Claim 5 (Currently Amended) A system for verifying a digital signature, comprising:

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a plurality of first computers each having a certificate of a set of certificates and a respective signed message signed in association with the certificate comprising a digest;

a plurality of second computers in communication with the first computers and configured to receive respective certificates and associated signed messages; and

a third computer in communication with the second computers and configured to receive validation requests for the certificates and the signed messages from the plurality of second computers, the third computer configured to validate the certificates, to generate a certificate validation statements, and to provide each of the second computers an acknowledgement and a public key, the acknowledgement comprising in part a certificate validation statement, the signed message, a first proof portion having a confirmation associated with the certificate validation statement and the signed message in combination, and a second proof portion having a signed digest having the confirmation as part of a set of confirmations for the second computers, whereby ones acknowledgement comprises a response to the set of certificates of the first computers in the digest.

Claim 6 (Original) The system of claim 5 further comprising a fourth computer in communication with the third computer and configured to confirm at least a portion of the acknowledgement.

Claims 7-16 (Cancelled)

Claim 17 (New) The system of claim 5 wherein the digest is a Merkle authentication tree.

Claim 18 (New) The system of claim 5 wherein $d = h(h_1 || h_{i+1})$ and $i = \text{each request}$.